

What is claimed is:

1. A beam joint, comprising:
  - a first portion having a first protruding element with a first beveled face;
  - 5 a second portion having a second protruding element configured to mate with the first protruding element;
  - a transverse stabilizer on the first portion; and
  - a transverse stabilizer receptor for receiving the transverse stabilizer.
- 10 2. The beam joint of claim 1, further comprising a fastener, transversally located through the second portion to retain the first protruding element in mating with the second protruding element.
3. The beam joint of claim 2, wherein the fastener comprises a bolt and nut.
- 15 4. The beam joint of claim 1, further comprising a fastener hole that is located transversally in the first portion and the second portion.
5. The beam joint of claim 4, wherein the fastener hole in the first portion is threaded.
- 20 6. The beam joint of claim 4, further comprising a fastener, located in the fastener hole, to retain the second protruding element in a mating configuration with the first protruding element.
- 25 7. The beam joint of claim 1, wherein the second protruding element comprises a

second beveled face, the first beveled face configured to mate with the second beveled face.

8. The beam joint of claim 7, wherein the first beveled face extends across a full cross-section of the first portion and the second beveled face extends across a full cross-section of  
5 the second portion.

9. The beam joint of claim 7, the first portion further comprising a first inner face and a first end face, the transverse stabilizer located at the first inner face.

10 10. The beam joint of claim 9, the second portion further comprising a second inner face and a second end face, the transverse stabilizer receptor located at the second inner face.

11. The beam joint of claim 10, the first inner face and the second end face configured to mate and the second inner face and the first end face configured to mate upon assembly of  
15 the beam joint.

12. The beam joint of claim 1, wherein the first portion and second portion are each located at an end of a six-sided beam.

20 13. The beam joint of claim 1, wherein the first portion and second portion are each located at an end of a tube having a circular cross-section.

14. The beam joint of claim 1, wherein the first portion and second portion are each located at an end of a tube having a square cross-section.

15. The beam joint of claim 1, wherein the transverse stabilizer is secured to the first portion by an aluminum weld.

16. The beam joint of claim 1, wherein the transverse stabilizer is formed of a material 5 different from the first beveled face.

17. The beam joint of claims 1-16, wherein the first protruding element and second protruding element are configured to release from one another by a first movement that is perpendicular to a direction of movement inhibited by the transverse stabilizer.

10

18. The beam joint of claim 17, wherein the first movement is also perpendicular to a longitudinal axis of a beam structure formed by the beam joint.

19. A main beam of a bicycle, comprising:

15

a first portion coupled to a head tube and having a first protruding element;  
a second portion coupled to a seat tube and having a second protruding element  
configured to mate with the first protruding element;  
a transverse stabilizer located on one of the first portion and the second portion; and  
a transverse stabilizer receptor for receiving the transverse stabilizer and located on

20 another of the first portion and the second portion.

20. The main beam of claim 19, further comprising a fastener, transversally located in the first portion and the second portion to retain the first protruding element with the second protruding element.

25

21. The main beam of claims 19 and 20, wherein the first protruding element comprises a first beveled face and the second protruding element comprises a second beveled face, the first beveled face mating with the second beveled face; and  
wherein the first beveled face extends across a full cross-section of the first portion  
5 and the second beveled face extends across a full cross-section of the second portion.